



Morbidity and Mortality

JAN 26 1968

CDC LIBRARY

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

EPIDEMIOLOGIC NOTES AND REPORTS OUTBREAK OF MENINGOCOCCAL INFECTION Mississippi

CONTENTS

Epidemiologic Notes and Reports	
Outbreak of Meningococcal Infection - Mississippi	21
Epidemiologic Investigation of Influenza in Michigan	23
Surveillance Summary	
Measles - United States, 1967	22
International Notes	
Influenza - 1967	28

From January 14 through 19, 1968, four documented cases and four suspect cases of meningococcal infection with three deaths occurred among 56 elderly female patients, residing on the second floor of a Mississippi state hospital for the mentally ill. The outbreak began on January 14 when two patients suddenly died, and a third patient was admitted to the institution's infirmary with purulent meningitis (Figure 1). Clinical and epidemiologic investigation revealed that the first fatal case had a temperature of 107°F. before death. Autopsy on the second fatal case revealed bilateral adrenal hemorrhage. Gram

stains of cerebrospinal fluid from the third and fifth patients showed Gram-negative intracellular diplococci which was confirmed as meningococci by fluorescent antibody directed against Group B. This fifth patient died in shock; she had classical skin lesions of meningococcemia. Fluorescent antibody studies on autopsy material were

(Continued on page 22)

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	3rd WEEK ENDED		MEDIAN 1963 - 1967	CUMULATIVE, FIRST 3 WEEKS		
	JANUARY 20, 1968	JANUARY 21, 1967		1968	1967	MEDIAN 1963 - 1967
Aseptic meningitis	24	29	32	77	77	87
Brucellosis	—	1	3	2	7	10
Diphtheria	2	1	2	3	3	11
Encephalitis, primary:						
Arthropod-borne & unspecified	17	20	—	52	59	—
Encephalitis, post-infectious	9	7	—	28	20	—
Hepatitis, serum	76	29	—	177	108	—
Hepatitis, infectious	814	749	778	2,167	2,019	2,252
Malaria	36	27	5	112	67	5
Measles (rubeola)	555	1,473	5,946	1,274	4,039	14,819
Meningococcal infections, total	85	73	63	192	191	191
Civilian	82	68	—	188	177	—
Military	3	5	—	4	14	—
Mumps	5,429	—	—	12,443	—	—
Poliomyelitis, total	—	—	—	—	—	1
Paralytic	—	—	—	—	—	—
Rubella (German measles)	603	654	—	1,351	1,406	—
Streptococcal sore throat & scarlet fever	11,019	11,927	9,610	30,840	30,501	26,356
Tetanus	1	3	2	1	6	10
Tularemia	1	4	4	2	9	15
Typhoid fever	9	5	5	16	9	12
Typhus, tick-borne (Rky. Mt. spotted fever)	—	—	—	2	3	3
Rabies in animals	65	71	61	198	205	203

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

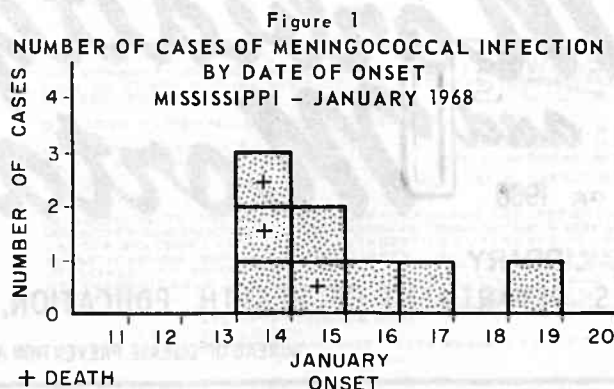
	Cum.		Cum.
Anthrax:	—	Rabies in man:	—
Botulism:	—	Rubella, Congenital Syndrome:	—
Leptospirosis:	—	Trichinosis: Pa.-1	2
Plague:	—	Typhus, murine:	—
Psittacosis	2	Polio, Unsp.	—

OUTBREAK OF MENINGOCOCCAL INFECTION - (Continued from front page)

strongly positive for *Neisseria meningitidis*. The seventh and eighth patients had classical skin lesions, and had positive nasopharyngeal and blood cultures for sulfonamide-resistant, Group B meningococci. Cases 4 and 6 were diagnosed on the bases of high fever, leukocytosis, and petechiae.

Epidemiologic investigation revealed that 34 percent of the 56 patients on the second floor had had documented temperature elevations and symptoms attributed to viral upper respiratory disease between January 3 and January 17. On January 17, a Group B meningococcal carrier rate of 16 percent was found among the 48 patients, then residing on the ward. All but one isolate (5 of 6) were sulfonamide-resistant. Preliminary results of nasopharyngeal swab surveys, of comparable male and female ward populations (174 males and 114 females) conducted at the institution on January 17 and 19, showed type B carrier rates of 6 percent or less. All these isolates were sulfonamide sensitive.

Since evidence implicated a type B sulfonamide-resistant meningococcal strain as the cause of the epidemic and as prevalent only in one building, strict quarantine measures were imposed, and antibiotic prophylaxis



with penicillin was initiated. Epidemiologic and laboratory investigations are continuing.

(Reported by William Jaquith, M.D., James Head, M.D., and Manning Hudson, M.D., Mississippi State Hospital, Whitfield, Mississippi; A. L. Gray, M.D., M.P.H., Executive Officer, and Durward L. Blakey, M.D., M.P.H., Director, Preventable Disease Control, Mississippi State Board of Health; and Epidemiological Services Laboratory Section, NCDC, and a team of EIS Officers.)

SURVEILLANCE SUMMARY MEASLES - United States, 1967

For the first time since reporting of measles began on a national basis (1912), the reported cases in 1967 were fewer than 100 per 100,000 population. In 1967, the case rate per 100,000 population was 37.4 as compared to 104.2 in 1966.

The frequency distribution of the states according to the reported measles cases per 100,000 population for calendar years 1966 and 1967 is shown in Table 1. The primary difference between 1966 and 1967 occurs in the high and low levels; there was essentially no change in the number of states falling into the two middle categories. However, there was a considerable change by individual states to a different rate category in the 2 years.

In 1967, 29 states, the District of Columbia, and New York City showed marked decreases in reported cases of

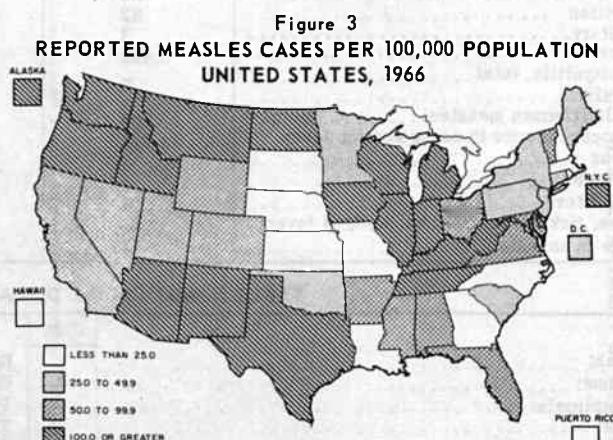
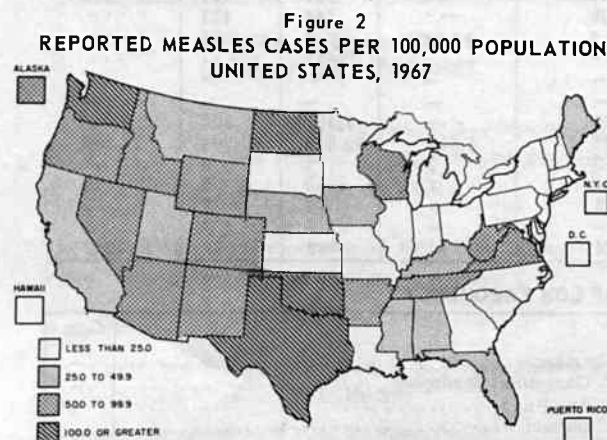
Table 1
Frequency Distribution of States* According to
Reported Measles Cases per 100,000 Population

Cases per 100,000 population	Number of States	
	1967	1966
Less than 25.0	25	11
25.0 to 49.9	10	9
50.0 to 99.9	13	14
100.0 or greater	4	18

*Includes the District of Columbia and New York City.

measles per 100,000 population from the 1966 reports. This is reflected by the maps in Figures 2 and 3; 10 states showed a decrease in rates, but the decrease was not enough to show improvement on the maps from 1966 to 1967.

(Continued on page 28)



Recently, a telephone survey to Michigan county health departments obtained the dates of onset of influenza in each county. The progress of influenza through Michigan was traced by analysis of these data. According to the survey results and to the dates of outbreaks submitted to NCDC, the first outbreak occurred at Western Michigan University in Kalamazoo in the 43rd week, October 21, of 1967 (MMWR, Vol. 16, No. 48). In the 44th week, influenza occurred in Battle Creek, Calhoun County, and in the 46th week, influenza occurred in Lansing. Following the Thanksgiving holiday, influenza spread rapidly in all

In these county outbreaks, influenza usually was first noted in the high schools. During the first week, a few cases of febrile respiratory illness occurred, and by the second week, school absenteeism from influenza increased to 25 or 30 percent. By the third week, influenza had spread to the elementary school children and adults in the county. By the end of the fourth week, only sporadic cases occurred, and the county epidemic was over. In the city epidemics, school absenteeism was also 25 to 30 percent; however, Traverse City reported 50 percent absenteeism, and Hesperia, Newaygo County, reported 70 percent. (Reported by George H. Agate, M.D., M.S.P.H., Chief Division of Epidemiology, and Maurice Becker, Ph.D., Chief, Virology Laboratory, Michigan Department of Public Health; and an EIS Officer.)

Figure 4
INFLUENZA AND INFLUENZA-LIKE ILLNESS IN MICHIGAN
BY COUNTY BY WEEK OF ONSET
OCTOBER - DECEMBER 1967



Copyright © 2004 John Wiley & Sons, Ltd.

1. *Journal of Management Studies*, 1996, 33, 1, 1-14.

DEC. 1969 AND JANUARY 1970

[illegible]

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JANUARY 20, 1968 AND JANUARY 21, 1967 (3rd WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA	
	1968	Cumulative		1968	Cumulative			1968	Total	Paralytic		
		1968	1967		1968	1967				1968		1968
UNITED STATES...	555	1,274	4,039	85	192	191	5,429	-	-	-	603	
NEW ENGLAND.....	16	37	34	2	7	6	556	-	-	-	44	
Maine.....	1	2	4	-	-	1	20	-	-	-	2	
New Hampshire.....	-	-	1	-	-	-	7	-	-	-	-	
Vermont.....	-	-	4	-	-	-	57	-	-	-	-	
Massachusetts.....	7	19	21	1	3	3	293	-	-	-	14	
Rhode Island.....	-	-	2	-	-	-	55	-	-	-	-	
Connecticut.....	8	16	2	1	4	2	124	-	-	-	28	
MIDDLE ATLANTIC.....	69	171	191	11	28	29	289	-	-	-	60	
New York City.....	12	24	24	5	6	6	84	-	-	-	30	
New York, Up-State.....	31	106	50	-	1	9	-	-	-	-	20	
New Jersey.....	19	33	86	2	8	11	205	-	-	-	10	
Pennsylvania.....	7	8	31	4	13	3	-	-	-	-	-	
EAST NORTH CENTRAL...	183	362	440	10	27	15	2,051	-	-	-	117	
Ohio.....	29	65	35	4	8	7	293	-	-	-	12	
Indiana.....	52	75	79	1	3	1	125	-	-	-	9	
Illinois.....	58	132	39	1	4	3	237	-	-	-	17	
Michigan.....	8	20	117	3	11	3	610	-	-	-	46	
Wisconsin.....	36	70	170	1	1	1	786	-	-	-	33	
WEST NORTH CENTRAL...	25	55	140	5	15	10	773	-	-	-	52	
Minnesota.....	-	-	5	-	1	1	26	-	-	-	5	
Iowa.....	9	21	29	1	1	2	617	-	-	-	27	
Missouri.....	-	1	6	2	4	3	17	-	-	-	-	
North Dakota.....	5	14	49	1	1	-	83	-	-	-	11	
South Dakota.....	1	2	14	-	2	1	-	-	-	-	-	
Nebraska.....	2	3	37	-	1	2	10	-	-	-	-	
Kansas.....	8	14	NN	1	5	1	20	-	-	-	9	
SOUTH ATLANTIC.....	35	106	406	27	46	33	392	-	-	-	29	
Delaware.....	-	-	-	-	-	-	9	-	-	-	1	
Maryland.....	4	8	2	1	1	3	39	-	-	-	5	
Dist. of Columbia..	-	-	4	-	1	-	-	-	-	-	-	
Virginia.....	6	16	66	4	4	3	101	-	-	-	14	
West Virginia.....	10	34	87	-	2	7	160	-	-	-	3	
North Carolina.....	-	2	75	4	8	7	-	-	-	-	-	
South Carolina.....	-	2	1	2	8	1	3	-	-	-	2	
Georgia.....	-	-	8	4	5	4	-	-	-	-	-	
Florida.....	15	44	163	12	17	8	80	-	-	-	-	
EAST SOUTH CENTRAL...	8	27	465	1	6	15	272	-	-	-	23	
Kentucky.....	1	4	65	-	2	4	99	-	-	-	-	
Tennessee.....	2	15	195	1	4	7	147	-	-	-	12	
Alabama.....	3	5	66	-	-	2	14	-	-	-	11	
Mississippi.....	2	3	139	-	-	2	12	-	-	-	-	
WEST SOUTH CENTRAL...	103	241	1,210	18	37	30	186	-	-	-	16	
Arkansas.....	-	-	137	-	1	-	-	-	-	-	-	
Louisiana.....	-	1	13	7	9	12	2	-	-	-	1	
Oklahoma.....	-	34	179	1	7	-	3	-	-	-	-	
Texas.....	103	206	881	10	20	18	181	-	-	-	15	
MOUNTAIN.....	15	52	340	-	2	6	127	-	-	-	89	
Montana.....	1	1	88	-	1	-	20	-	-	-	4	
Idaho.....	-	6	28	-	-	1	-	-	-	-	58	
Wyoming.....	2	13	-	-	-	-	16	-	-	-	-	
Colorado.....	5	15	42	-	-	1	-	-	-	-	8	
New Mexico.....	-	6	47	-	-	3	49	-	-	-	5	
Arizona.....	7	11	55	-	1	-	40	-	-	-	13	
Utah.....	-	-	10	-	-	-	2	-	-	-	1	
Nevada.....	-	-	70	-	-	1	-	-	-	-	-	
PACIFIC.....	101	223	813	11	24	47	783	-	-	-	173	
Washington.....	34	66	429	1	2	1	258	-	-	-	73	
Oregon.....	27	58	150	-	1	3	19	-	-	-	14	
California.....	39	87	189	10	21	42	486	-	-	-	81	
Alaska.....	-	-	39	-	-	1	9	-	-	-	5	
Hawaii.....	1	12	6	-	-	-	11	-	-	-	-	
Puerto Rico.....	9	9	113	-	-	-	25	-	-	-	1	

JANUARY 20, 1968 AND JANUARY 21, 1967 (3rd WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968
UNITED STATES...	11,019	1	1	1	2	9	16	-	2	65	198
NEW ENGLAND.....	1,400	-	-	-	-	1	1	-	-	-	2
Maine.....	27	-	-	-	-	-	-	-	-	-	2
New Hampshire.....	43	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-	-	-	-
Massachusetts.....	239	-	-	-	-	-	-	-	-	-	-
Rhode Island.....	85	-	-	-	-	-	-	-	-	-	-
Connecticut.....	1,006	-	-	-	-	1	1	-	-	-	-
MIDDLE ATLANTIC.....	198	-	-	-	-	4	5	-	-	1	1
New York City.....	13	-	-	-	-	4	4	-	-	-	-
New York, Up-State.....	165	-	-	-	-	-	1	-	-	1	1
New Jersey.....	NN	-	-	-	-	-	-	-	-	-	-
Pennsylvania.....	20	-	-	-	-	-	-	-	-	-	-
EAST NORTH CENTRAL...	1,093	1	1	1	1	1	2	-	-	5	18
Ohio.....	179	-	-	-	-	1	2	-	-	1	8
Indiana.....	232	-	-	-	-	-	-	-	-	2	6
Illinois.....	140	1	1	-	-	-	-	-	-	1	1
Michigan.....	292	-	-	1	1	-	-	-	-	1	2
Wisconsin.....	250	-	-	-	-	-	-	-	-	-	1
WEST NORTH CENTRAL...	491	-	-	-	-	1	2	-	-	12	26
Minnesota.....	56	-	-	-	-	-	-	-	-	1	5
Iowa.....	155	-	-	-	-	-	-	-	-	5	7
Missouri.....	7	-	-	-	-	1	2	-	-	4	7
North Dakota.....	184	-	-	-	-	-	-	-	-	1	4
South Dakota.....	44	-	-	-	-	-	-	-	-	-	-
Nebraska.....	3	-	-	-	-	-	-	-	-	1	1
Kansas.....	42	-	-	-	-	-	-	-	-	-	2
SOUTH ATLANTIC.....	1,106	-	-	-	-	-	1	-	2	7	24
Delaware.....	21	-	-	-	-	-	-	-	-	-	-
Maryland.....	152	-	-	-	-	-	1	-	-	-	-
Dist. of Columbia..	-	-	-	-	-	-	-	-	-	-	-
Virginia.....	448	-	-	-	-	-	-	-	2	2	10
West Virginia.....	203	-	-	-	-	-	-	-	-	2	4
North Carolina.....	37	-	-	-	-	-	-	-	-	-	-
South Carolina.....	13	-	-	-	-	-	-	-	-	-	-
Georgia.....	15	-	-	-	-	-	-	-	-	1	3
Florida.....	217	-	-	-	-	-	-	-	-	2	7
EAST SOUTH CENTRAL...	1,427	-	-	-	-	1	3	-	-	23	81
Kentucky.....	79	-	-	-	-	-	-	-	-	9	25
Tennessee.....	1,196	-	-	-	-	1	3	-	-	12	53
Alabama.....	102	-	-	-	-	-	-	-	-	2	3
Mississippi.....	50	-	-	-	-	-	-	-	-	-	-
WEST SOUTH CENTRAL...	1,227	-	-	-	-	-	-	-	-	13	37
Arkansas.....	7	-	-	-	-	-	-	-	-	2	3
Louisiana.....	1	-	-	-	-	-	-	-	-	1	3
Oklahoma.....	132	-	-	-	-	-	-	-	-	4	11
Texas.....	1,087	-	-	-	-	-	-	-	-	6	20
MOUNTAIN.....	2,012	-	-	-	1	-	-	-	-	1	2
Montana.....	59	-	-	-	-	-	-	-	-	-	-
Idaho.....	146	-	-	-	-	-	-	-	-	-	-
Wyoming.....	162	-	-	-	-	-	-	-	-	-	-
Colorado.....	1,134	-	-	-	-	-	-	-	-	-	-
New Mexico.....	294	-	-	-	-	-	-	-	-	-	-
Arizona.....	130	-	-	-	-	-	-	-	-	1	2
Utah.....	87	-	-	-	1	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	2,065	-	-	-	-	1	2	-	-	3	7
Washington.....	670	-	-	-	-	-	-	-	-	-	-
Oregon.....	179	-	-	-	-	-	-	-	-	-	-
California.....	1,158	-	-	-	-	1	2	-	-	3	7
Alaska.....	34	-	-	-	-	-	-	-	-	-	-
Hawaii.....	24	-	-	-	-	-	-	-	-	-	-
Puerto Rico.....	2	-	-	-	-	-	-	-	-	-	-

Morbidity and Mortality Weekly Report

27

Week No.

3

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED JANUARY 20, 1968

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	1,068	680	102	36	SOUTH ATLANTIC:	1,469	842	103	63
Boston, Mass.-----	374	219	34	17	Atlanta, Ga.-----	172	85	9	9
Bridgeport, Conn.-----	47	30	11	2	Baltimore, Md.-----	340	198	19	11
Cambridge, Mass.-----	45	30	-	1	Charlotte, N. C.-----	56	28	11	2
Fall River, Mass.-----	59	42	4	-	Jacksonville, Fla.-----	90	50	4	5
Hartford, Conn.-----	61	34	1	4	Miami, Fla.-----	124	60	2	5
Lowell, Mass.-----	39	27	3	-	Norfolk, Va.-----	63	33	5	6
Lynn, Mass.-----	33	21	3	-	Richmond, Va.-----	88	59	-	5
New Bedford, Mass.-----	34	25	2	-	Savannah, Ga.-----	59	41	10	2
New Haven, Conn.-----	66	42	4	2	St. Petersburg, Fla.-----	94	80	7	-
Providence, R. I.-----	108	74	18	1	Tampa, Fla.-----	90	52	9	2
Somerville, Mass.-----	12	8	2	-	Washington, D. C.-----	255	138	22	15
Springfield, Mass.-----	70	45	8	3	Wilmington, Del.-----	38	18	5	1
Waterbury, Conn.-----	31	21	1	-					
Worcester, Mass.-----	89	62	11	6	EAST SOUTH CENTRAL:	898	547	92	22
MIDDLE ATLANTIC:	4,209	2,644	308	150	Birmingham, Ala.-----	157	99	19	5
Albany, N. Y.-----	63	33	6	1	Chattanooga, Tenn.-----	67	34	9	2
Allentown, Pa.-----	34	16	1	1	Knoxville, Tenn.-----	75	55	6	-
Buffalo, N. Y.-----	184	118	4	8	Louisville, Ky.-----	151	94	20	-
Camden, N. J.-----	43	26	5	1	Memphis, Tenn.-----	170	89	7	6
Elizabeth, N. J.-----	48	32	5	-	Mobile, Ala.-----	72	42	10	6
Erie, Pa.-----	49	30	5	1	Montgomery, Ala.-----	53	27	9	1
Jersey City, N. J.-----	119	78	12	2	Nashville, Tenn.-----	153	107	12	2
Newark, N. J.-----	114	54	15	25	WEST SOUTH CENTRAL:	1,656	975	208	74
New York City, N. Y.-----	2,188	1,390	150	74	Austin, Tex.-----	59	41	14	-
Paterson, N. J.-----	54	33	8	1	Baton Rouge, La.-----	56	31	10	3
Philadelphia, Pa.-----	563	349	15	16	Corpus Christi, Tex.-----	37	18	6	2
Pittsburgh, Pa.-----	256	144	19	6	Dallas, Tex.-----	278	168	45	12
Reading, Pa.-----	58	35	10	2	El Paso, Tex.-----	47	27	5	3
Rochester, N. Y.-----	146	101	26	6	Fort Worth, Tex.-----	129	88	9	5
Schenectady, N. Y.-----	31	20	2	-	Houston, Tex.-----	255	113	12	18
Scranton, Pa.-----	44	32	12	-	Little Rock, Ark.-----	84	49	9	3
Syracuse, N. Y.-----	80	59	1	3	New Orleans, La.-----	252	152	26	7
Trenton, N. J.-----	65	42	4	1	Oklahoma City, Okla.-----	123	80	16	4
Utica, N. Y.-----	34	24	5	-	San Antonio, Tex.-----	158	98	10	8
Yonkers, N. Y.-----	36	28	3	2	Shreveport, La.-----	75	50	21	3
					Tulsa, Okla.-----	103	60	25	6
EAST NORTH CENTRAL:	3,195	1,899	158	148	MOUNTAIN:	532	321	54	31
Akron, Ohio-----	71	45	-	2	Albuquerque, N. Mex.-----	53	32	13	2
Canton, Ohio-----	43	27	7	1	Colorado Springs, Colo.-----	32	21	5	1
Chicago, Ill.-----	997	575	55	42	Denver, Colo.-----	167	102	9	12
Cincinnati, Ohio-----	188	114	2	9	Ogden, Utah-----	30	17	2	2
Cleveland, Ohio-----	242	124	5	10	Phoenix, Ariz.-----	98	56	15	8
Columbus, Ohio-----	184	108	5	12	Pueblo, Colo.-----	29	20	2	3
Dayton, Ohio-----	100	57	8	2	Salt Lake City, Utah-----	66	36	3	2
Detroit, Mich.-----	380	208	9	22	Tucson, Ariz.-----	57	37	5	1
Evansville, Ind.-----	52	39	5	1	PACIFIC:	1,830	1,146	55	63
Flint, Mich.-----	39	17	3	1	Berkeley, Calif.-----	22	15	-	-
Fort Wayne, Ind.-----	47	36	5	2	Fresno, Calif.-----	56	33	2	5
Gary, Ind.-----	46	21	6	4	Glendale, Calif.-----	40	24	2	-
Grand Rapids, Mich.-----	50	37	7	1	Honolulu, Hawaii-----	46	23	1	7
Indianapolis, Ind.-----	180	111	4	8	Long Beach, Calif.-----	93	59	1	2
Madison, Wis.-----	33	18	-	2	Los Angeles, Calif.-----	600	382	11	23
Milwaukee, Wis.-----	162	103	8	19	Oakland, Calif.-----	73	53	2	2
Peoria, Ill.-----	42	28	3	1	Pasadena, Calif.-----	37	20	-	1
Rockford, Ill.-----	49	40	5	1	Portland, Ore.-----	145	95	3	6
South Bend, Ind.-----	63	46	9	2	Sacramento, Calif.-----	71	48	2	1
Toledo, Ohio-----	154	96	11	5	San Diego, Calif.-----	95	51	5	4
Youngstown, Ohio-----	73	49	1	2	San Francisco, Calif.-----	204	122	5	3
WEST NORTH CENTRAL:	1,147	815	97	35	San Jose, Calif.-----	46	32	2	1
Des Moines, Iowa-----	73	50	2	-	Seattle, Wash.-----	204	123	16	4
Duluth, Minn.-----	14	11	-	-	Spokane, Wash.-----	50	37	3	2
Kansas City, Kans.-----	57	32	6	4	Tacoma, Wash.-----	48	29	-	2
Kansas City, Mo.-----	198	145	12	1					
Lincoln, Nebr.-----	46	40	13	1	Total	16,004	9,869	1,177	622
Minneapolis, Minn.-----	151	110	7	6	Estimated expected no.	13,614	7,933	656	712
Omaha, Nebr.-----	107	74	4	3	Cumulative Totals				
St. Louis, Mo.-----	345	236	30	13	including reported corrections for previous weeks				
St. Paul, Minn.-----	75	54	8	5	All Causes, All Ages-----	46,229			
Wichita, Kans.-----	81	63	15	2	All Causes, Age 65 and over-----	28,245			
					Pneumonia and Influenza, All Ages-----	3,038			
					All Causes, Under 1 Year of Age-----	1,850			

MEASLES - United States (*Continued from page 22*)

An increase in case rates over 1966 was noted in 11 states. However, only two states (Oklahoma and Nebraska) showed increases of magnitude to change to a different classification on the maps. In some of these 11 states, the higher rates are due to improved reporting.

Of the 18 states with reported measles cases of 100 or greater per 100,000 population in 1966, three showed case rates greater than 100 in 1967 (North Dakota, Texas, and Washington). In 1966, the case rates ranged from 103.7 to 738.5 for these 18 states. In 1967, the case rates for the four states with a rate greater than 100 per 100,000 population ranged from 122.9 to 184.2.

In 1967, of the 25 states reporting fewer than 25 measles cases per 100,000 population, 16 (64 percent) had rates less than 10; of the 11 states in 1966 with a rate less than 25, five (45 percent) reported fewer cases than 10 per 100,000 population.

(Reported by the State Services Section and the Statistics Section, NCDC.)

INTERNATIONAL NOTES

INFLUENZA - 1967

The World Health Organization has received official reports of influenza activity from the following Asian countries:

Japan: (information dated 7 December) - Since mid-November, outbreaks of influenza-like disease have been reported in several primary and middle schools in Tokyo and Aichi Prefectures. In the Tokyo area, the epidemic has a tendency to spread gradually.

A strain of virus A2 has been isolated from sick children in a school in Tokyo. It is antigenically almost identical with those isolated in Japan during the epidemics of 1965 and early 1967.

Further reports from Japan: (information dated 21 December 1967) - The influenza epidemic which started in Tokyo and Aichi Prefectures seems to be gradually spreading from east to west. Scattered outbreaks, mostly in primary and middle schools, have recently been reported from the western part of Japan, especially from Kyushu District.

Strains of virus A2 have been isolated in Tokyo and Yokohama, and Kyoto Prefecture.

Serological evidence of infection with Virus A2 has been obtained in Aichi, Hyogo and Saitama Prefecture.

Taiwan: Sporadic cases of influenza-like illness were reported in children and adults in late November and early December 1967. Strains preliminarily identified as virus B have been isolated from specimens collected in the Taipei city area.

(Compiled from the *Weekly Epidemiological Record*, WHO, Vol. 42, No. 50, and Vol. 43, Nos. 1-2.)

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 17,000, IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER
DAVID J. SENCER, M.D.
CHIEF, EPIDEMIOLOGY PROGRAM
A.D. LANGMUIR, M.D.
ACTING CHIEF, STATISTICS SECTION
IDA L. SHERMAN, M.S.
EDITOR
MICHAEL B. GREGG, M.D.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE NATIONAL COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

NATIONAL COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333
ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL
NATIONAL
COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333
OFFICIAL BUSINESS

Library
81
7 61
CDC

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF H. E. W.